PLASMIDS AND METHODS FOR MONITORING ENDONUCLEASE DIGESTION EFFICIENCY

ABSTRACT

[0085] A method is disclosed herein for monitoring the efficiency of an endonuclease digestion using a plasmid specifically designed for that purpose. The plasmid of the present invention comprises at least two polylinker regions containing a plurality of unique restriction sites distributed so that digestion of the plasmid with any two restriction endonucleases whose sites are represented on the plasmid results in two fragments that are sufficiently different in size from the intact plasmid so as to be readily distinguishable therefrom. To ensure this size differential, the polylinker regions of the plasmid are separated by a spacer segment comprising a restriction site-free nucleic acid sequence that is at least about 15% of the length of the intact plasmid.